

Appl. No. 10/034,218
Amdt. dated May 12, 2005
Reply to final Office action of March 14, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A computer system, comprising:
 - a host processor;
 - a plurality of fan controllers coupled to said host processor; and
 - a fan coupled to each fan controller;

wherein the fan controllers are inter-connected by a fault signal which, when asserted, is used to transmit fault information between the fan controllers without host processor involvement and which remains asserted even when a fault associated with said fault information subsides; and

wherein each fan controller comprises a register that includes a bit that can be set by said host processor to cause said fan controller to not assert said fault signal upon detection of a fault; and

wherein at least one of the fan controllers can cause a fan to spin while not causing another fan to spin to thereby test the fan caused to be spun.
2. (Original) The computer system of claim 1 wherein a fan controller receives said fault information from another fan controller and responds by changing the speed of its fan.
3. (Original) The computer system of claim 2 wherein said fan controller increases the speed of its fan.
4. (Original) The computer system of claim 1 further including a bridge disposed between said host processor and said fan controllers, said bridge also coupled to said fault signal.

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5. (Previously presented) The computer system of claim 1 wherein said register can be accessed by said host processor to determine which fan controller asserted said fault signal.
6. (Canceled).
7. (Canceled).
8. (Original) The computer system of claim 1 wherein a fan controller asserts said fault signal upon detection of a fault with respect to its fan.
9. (Original) The computer system of claim 1 wherein a fan controller contains a register which contains a value of the fan speed when said fault information from another fan controller is received.
10. (Currently amended) A fan controller, comprising:
 - an interface to controlling logic;
 - an interface to at least first and second serially arranged a-fans which permits said fan controller to control the speed of said fans;
 - a programmable register accessible by a host processor via said controlling logic; and
 - an input/output fault signal adapted to be coupled to another fan controller through which, when said I/O fault signal is asserted, fault information can be shared between fan controllers without host processor involvement and wherein said I/O fault signal remains asserted even when a fault associated with the fault information subsides;
 - wherein said register includes a bit that can be set by said host processor to cause said fan controller to not assert said input/output fault signal upon detection of a fault; and

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wherein said register includes a second bit that can be programmed to cause the first fan to spin while precluding the second fan from spinning to thereby test the first fan.

11. (Currently amended) The fan controller of claim 10 wherein said fan controller can receive said fault information from another fan controller and responds by changing the speed of one or more of its fans.

12. (Currently amended) The fan controller of claim 11 wherein said fan controller increases the speed of one or more of its fans.

13. (Original) The fan controller of claim 10 wherein said controlling logic comprises a bridge disposed between said host processor and said fan controller, and said fault signal adapted to be provided to said bridge.

14. (Previously presented) The fan controller of claim 10 wherein said register can be used by said host processor to determine whether the fan controller asserted said fault signal.

15. (Canceled).

16. (Canceled).

17. (Currently amended) The fan controller of claim 10 wherein said fan controller asserts said fault signal upon detection of a fault with respect to one or more of its fans.

18. (Currently amended) The fan controller of claim 10 further including a register which contains a value of the fan speed when said fault information from another fan controller is received.

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19. (Currently amended) A method of controlling fans in a computer system having multiple fan controllers and a host processor, comprising:
detecting a fault with respect to a fan;
transmitting fault information from one fan controller to another via a fault signal without using said host processor and only if a register is written with a value that permits said fault information to be transmitted and continuing to transmit said fault information even when a fault associated with said fault information subsides, otherwise, not transmitting said fault information; and
responding to said asserted fault signal if said fault information is transmitted; and
testing said fan by causing said fan to spin while precluding a second fan from spinning and then testing said second fan by causing said second fan to spin while precluding the previously spinning fan from spinning.

20. (Previously presented) The method of claim 19 wherein transmitting the fault information includes asserting a fault signal interconnecting at least one pair of said fan controllers.

21. (Previously presented) The method of claim 19 wherein responding to said asserted fault signal includes increasing fan speed.

22. (New) The computer system of claim 1 wherein said fault signal remains asserted until cleared by said host processor.

23. (New) The computer system of claim 1 wherein said at least one fan controller causes said fan that was caused to be spun to cease spinning and causes another fan to be spun to thereby test said other fan.

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24. (New) The fan controller of claim 10 wherein said I/O fault signal remains asserted until cleared by a host processor external to said fan controller.

25. (New) The fan controller of claim 10 wherein said fan controller causes said first fan to cease spinning and causes said second fan to spin to thereby test said second fan.